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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/728,413	12/05/2003	Setho Sing Fee	2269-4738.1US (00-1113.01)	9766
24247	7590	02/07/2005	EXAMINER CHAMBLISS, ALONZO	
TRASK BRITT P.O. BOX 2550 SALT LAKE CITY, UT 84110			ART UNIT 2814	PAPER NUMBER

DATE MAILED: 02/07/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/728,413

Applicant(s)

FEE ET AL.

Examiner

Alonzo Chambliss

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 November 2004.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) 5 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4 and 6-69 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 05 December 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 2.3.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Election/Restrictions

1. Applicant's election without traverse of claims 1-4 in the reply filed on claims 1-4 is acknowledged. However, the species of A1 includes claims 6-9. Therefore, a rejection of claims 1-4 and 6-9 are set forth below.
2. Claim 5 is withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected species A2, there being no allowable generic or linking claim.

Priority

3. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Information Disclosure Statement

4. The information disclosure statement (IDS) submitted on 5/20/04 and 9/17/04 was filed before the mailing date of the non-final rejection on 2/3/05. The submission is in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statement is being considered by the examiner.

Drawings

5. The formal drawings filed on 12/5/03 have been approved by the examiner.

Specification

6. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed. The following title is suggested: " QUAD FLAT NO-LEAD GRID ARRAY PACKAGE ".

Claim Rejections - 35 USC § 102

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

8. Claims 1-4 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Tsuji et al. (U.S. 5,656,550).

With respect to Claim 1, Tsuji teaches a plurality of leads 103 and including at least one lead having. A first bonding region 94, a second bonding region 97, and second bonding 97 a severance region 99 located between the first bonding region 94 an region, the severance region 99 being configured to facilitate separation of the first bonding region 94 from the second bonding region 97 (see col. 21 lines 45-67, col. 1-67, and col. 23 lines 1-67, and col. 24 lines 1-1-15; Figs. 29A-29D, 30A, 30B, 31A, 31B, and 32).

With respect to Claims 2 and 4, Tsuji teaches wherein the severance region 99 includes a notch in the at least one lead 103 (see col. 21 lines 45-67, col. 1-67, and col. 23 lines 1-67, and col. 24 lines 1-1-15; Figs. 29A-29D, 30A, 30B, 31A, 31B, and 32).

With respect to Claim 3, Tsuji teaches wherein each of the plurality of leads includes a first bonding region, a second bonding region, and a severance region on configured to facilitate separation of the first and second bonding region (see Figs. 29A-29D, 30A, 30B, 31A, 31B, and 32).

9. Claims 6-9 are rejected under 35 U.S.C. 102(e) as being clearly anticipated by Bayan et al. (U.S. 6,399,415).

With respect to Claim 6, Bayan teaches a plurality of longitudinally arranged lead frames in the prior art Fig. 1A, each lead frame including an outer frame portion bearing a plurality of inwardly extending, cantilevered leads each lead of the plurality having thereon at least two longitudinally spaced locations separated by a severance region comprising a notch 240 extending laterally across each lead 209 (see col. 3 lines 61-67, and col. 4 lines 1-67, and col. 5 lines 1-67; Figs. 1B3A, 3B, 4, 5, 6A-6F, 7, and 8).

With respect to Claims 7-9, Bayan teaches wherein each outer frame portion further bears a die paddle 207 substantially centered therein and a plurality of inwardly extending cantilevered leads is located on a plurality of sides (i.e. four sides) of each outer frame portion (see Figs. 1A, 1B, and 7).

The prior art made of record and not relied upon is cited primarily to show the product of the instant invention.

Conclusion

10. Any inquiry concerning the communication or earlier communications from the

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examiner should be directed to Alonzo Chambliss whose telephone number is (571) 272-1927.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 308-7956.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system Status information for published applications may be obtained from either Private PMR or Public PMR. Status information for unpublished applications is available through Private PMR only. For more information about the PMR system see <http://pair-dkect.uspto.gov>. Should you have questions on access to the Private PMR system contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free) or EBC_Support@uspto.gov.

AC/February 3, 2005

A handwritten signature in black ink, appearing to read 'Alonzo Chambliss', is written in a cursive style.

Alonzo Chambliss
Primary Patent Examiner
Art Unit 2814